

**National Center for Environmental Health and
Agency for Toxic Substances and Disease Registry
Centers for Disease Control and Prevention**

**Responses to Unanswered Questions Received During and Following
Live Interactive Satellite Broadcast on September 18, 2003**

“Managing Rodents and Mosquitoes Through Integrated Pest Management”

Caller: Jill from Maryland

Question: Is it true that many of the steps discussed for rodent and mosquito control also are applicable to roaches?

Answer: Yes. Integrated pest management is a systems approach that is applicable to all pests. It is a programmatic way to tailor four primary components (monitoring, establishing tolerance or threshold limits, conducting interventions, and evaluation) to a particular situation.

This broadcast focused on rodents and mosquitoes because of recent attention generated by new and emerging threats related to them. Because the broadcast was time limited, CDC could not address other disease vectors such as roaches. In the coming year, CDC plans to present another program on “healthy housing.” We plan to cover vector control more broadly in that program and to address the subject of roaches.

Caller: Stephen from Chicago

Question: How important a role should code enforcement play in controlling vectors such as rats, mice, and mosquitoes?

Answer: Code enforcement is a critical intervention in the application of integrated pest management principles. However, first and foremost is the effort to work with the community and individuals to change or modify behaviors through education and outreach. Code enforcement is a necessary complement to education and outreach. Some people regard code enforcement as a form of education.

Caller: Mary from Pittsburgh

Question: When does CDC expect to have available the rodent manual that was mentioned during the broadcast?

Answer: Within the next 6 months to a year, we hope to publish or post critical sections (e.g., conducting urban rodent surveys) on CDC’s Website.

Jonathan from New York City

Question: Using plastic bags for outdoor refuse storage provides a ready source of food for rats and mice. Why is this problem neglected by so many health departments?

Answer: The short answer is that many in decision-making positions have come to value the convenience of plastic bags over good environmental public health practice.

Proper refuse storage is possible only through the use of containers of adequate construction, size, and number. They should be (1) water-tight with tightfitting lids, (2) structurally strong and made of galvanized metal or heavy plastic, and (3) of such size that they are easy to empty and clean. This applies to refuse stored in basements or in other interior locations of multi-dwelling buildings.

Plastic refuse bags as liners for proper refuse containers are acceptable, but they should not be used alone to store refuse outdoors unless they are securely tied, intact, and placed outdoors **only** during the morning of refuse collection.

Carol from Atlanta

Question: Do rats and mice present a significant disease threat?

Answer: Rats and mice are responsible for the spread of a number of diseases, either directly, by contamination of human food with their urine or feces, or indirectly, by way of rodent fleas and mites.

Although no major disease outbreaks have occurred in large population centers in recent years, the potential always exists that infection is passed from rodents to humans, especially in urban communities. Although little defining data exists on the transmission of diseases from rats and mice to humans, some of the more common diseases associated with these pests are salmonellosis, leptospirosis, and plague.

Injury caused by rodent bites also should be mentioned. These bites can create a serious health problem and are far more common than most people realize. Many cases do not get reported, but based on available data, CDC estimates that nearly 10,000 people in the United States are bitten annually by rats and mice.

Furthermore, though not related directly to human disease and injury, enormous economic losses are caused by rats and mice in the human environment. Although we don't have a reliable estimate for calculating these losses, we know that rats and mice consume or contaminate vast quantities of food and animal feed; they destroy property; and they even have caused house fires by gnawing the insulation from electric wires.